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 35 40 45  
 Pro Ser Asp Asp Val Gly Ala Pro Ala Asp Val Arg Asp Arg Ile Asp  
 50 55 60  
 Ser Val Val Asn Asp Asp Ala Gln Gly Thr Ala Asn Leu Ala Gly Asp  
 65 70 75 80  
 Asn Asn Gly Gly Gly Asp Asn Asn Gly Gly Gly Arg Gly Gly Gly Glu  
 85 90 95  
 Gly Arg Gly Asn Ala Asp Ala Thr Phe Thr Tyr Arg Pro Ser Val Pro  
 100 105 110  
 Ala His Arg Arg Ala Arg Glu Ser Pro Leu Ser Ser Asp Ala Ile Phe  
 115 120 125  
 Lys Gln Ser His Ala Gly Leu Phe Asn Leu Cys Val Val Val Leu Ile  
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 Ala Val Asn Ser Arg Leu Ile Ile Glu Asn Leu Met Lys Tyr Gly Trp  
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 165 170 175  
 Pro Leu Phe Met Cys Trp Ile Ser Leu Ser Ile Phe Pro Leu Ala Ala  
 180 185 190  
 Phe Thr Val Glu Lys Leu Val Leu Gln Lys Tyr Ile Ser Glu Pro Val  
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 Gly Ile Phe Leu His Ile Ile Ile Thr Met Thr Glu Val Leu Tyr Pro  
 210 215 220  
 Val Tyr Val Thr Leu Arg Cys Asp Ser Ala Phe Leu Ser Gly Val Thr  
 225 230 235 240  
 Leu Met Leu Leu Thr Cys Ile Val Trp Leu Lys Leu Val Ser Tyr Ala  
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 His Thr Ser Tyr Asp Ile Arg Ser Leu Ala Asn Ala Ala Asp Lys Ala  
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 Asn Pro Glu Val Ser Tyr Tyr Val Ser Leu Lys Ser Leu Ala Tyr Phe  
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Phe	Thr	Gly	Phe	Met	Gly	Phe	Ile	Ile	Glu	Gln	Tyr	Ile	Asn	Pro	Ile	325	330	335
Val	Arg	Asn	Ser	Lys	His	Pro	Leu	Lys	Gly	Asp	Leu	Leu	Tyr	Ala	Ile	340	345	350
Glu	Arg	Val	Leu	Lys	Leu	Ser	Val	Pro	Asn	Leu	Tyr	Val	Trp	Leu	Cys	355	360	365
Met	Phe	Tyr	Cys	Phe	Phe	His	Leu	Trp	Leu	Asn	Ile	Leu	Ala	Glu	Leu	370	375	380
Leu	Cys	Phe	Gly	Asp	Arg	Glu	Phe	Tyr	Lys	Asp	Trp	Trp	Asn	Ala	Lys	385	390	395
Ser	Val	Gly	Asp	Tyr	Trp	Arg	Met	Trp	Asn	Met	Pro	Val	His	Lys	Trp	405	410	415
Met	Val	Arg	His	Ile	Tyr	Phe	Pro	Cys	Leu	Arg	Ser	Lys	Ile	Pro	Lys	420	425	430
Thr	Leu	Ala	Ile	Ile	Ile	Ala	Phe	Leu	Val	Ser	Ala	Val	Phe	His	Glu	435	440	445
Leu	Cys	Ile	Ala	Val	Pro	Cys	Arg	Leu	Phe	Lys	Leu	Trp	Ala	Phe	Leu	450	455	460
Gly	Ile	Met	Phe	Gln	Val	Pro	Leu	Val	Phe	Ile	Thr	Asn	Tyr	Leu	Gln	465	470	475
Glu	Arg	Phe	Gly	Ser	Thr	Val	Gly	Asn	Met	Ile	Phe	Trp	Phe	Ile	Phe	485	490	495
Cys	Ile	Phe	Gly	Gln	Pro	Met	Cys	Val	Leu	Leu	Tyr	Tyr	His	Asp	Leu	500	505	510
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<213> Zea mays

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Phe Asn Asn Leu Val Ser Asp Pro Ala Thr Thr Cys Phe His Ile Leu  
35 40 45  
Phe Thr Thr Phe Glu Ile Val Tyr Pro Val Leu Val Ile Leu Lys Cys  
50 55 60  
Asp Ser Ala Val Leu Ser Gly Phe Val Leu Met Phe Ile Ala Cys Ile  
65 70 75 80  
Val Trp Leu Lys Leu Val Ser Phe Ala His Thr Asn His Asp Ile Gly  
85 90 95  
Lys Leu Ile Thr Ser Gly Lys Lys Val Asp Asn Glu Leu Thr Ala Ala  
100 105 110  
Gly Ile Asp Asn Leu Gln Xaa Pro Thr Leu Gly Ser Leu Thr Tyr Phe  
115 120 125  
Lys Met Ala Pro Thr Leu Cys Tyr Gln Ala Lys Val Ile Leu Arg Thr  
130 135 140  
Pro Tyr Val Arg Lys Gly Trp Leu Val Arg Gln Val Ile Leu Tyr Leu  
145 150 155 160  
Ile Phe Thr Gly Leu Gln Gly Phe Ile Ile Glu Gln Tyr Ile Asn Pro  
165 170 175  
Ile Val Val Asn Ser Gln His Pro Leu Met Gly Gly Leu Leu Asn Ala  
180 185 190  
Val Glu Thr Val Leu Lys Leu Ser Leu Pro Asn Val Tyr Leu Trp Leu  
195 200 205  
Cys Met Phe Tyr Cys Leu Phe His Leu Trp Leu Asn Ile Leu Ala Glu  
210 215 220  
Ile Leu Arg Phe Gly Asp Arg Glu Phe Tyr Lys Asp Trp Trp Asn Ala  
225 230 235 240

Lys Thr Ile Asp Glu Tyr Trp Arg Lys Trp Asn Met Pro Val His Lys  
245 250 255

Trp Ile Val Arg His Ile Tyr Phe Pro Cys Met Arg Asn Gly Ile Ser  
260 265 270

Lys Glu Val Ala Val Phe Ile Ser Phe Phe Val Ser Ala Val Leu His  
275 280 285

Glu Tyr Val Leu Leu Phe Leu His Ile Leu Lys Phe Trp Ala Phe Leu  
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Gly Ile Met Leu Gln Ile Pro Leu Ile Ile Leu Thr Ser Tyr Leu Lys  
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Asn Lys Phe Ser Asp Thr Met Val Gly Asn Met Ile Phe Trp Phe Phe  
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<212> PRT  
<213> Zea mays

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20 25 30

Ile Val Val Asn Ser Gln His Pro Leu Met Gly Gly Leu Leu Asn Ala  
35 40 45

Val Glu Thr Val Leu Lys Leu Ser Leu Pro Asn Val Tyr Leu Trp Leu  
50 55 60

Cys Met Phe Tyr Cys Leu Phe His Leu Trp Leu Asn Ile Leu Ala Glu  
65 70 75 80

Ile Leu Arg Phe Gly Asp Arg Glu Phe Tyr Lys Asp Trp Trp Asn Ala  
85 90 95

Lys Thr Ile Asp Glu Tyr Trp Arg Lys Trp Asn Met Pro Val His Lys  
100 105 110

Trp Ile Val Arg His Ile Tyr Phe Pro Cys Met Arg Asn Gly Ile Ser  
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 <212> PRT  
 <213> Zea mays

<400> 8

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Leu	Ala	Phe	Asn	Asn	Leu	Val	Ser	Asp	Pro	Ala	Thr	Thr	Cys	Phe	His
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Ile	Leu	Phe	Thr	Thr	Phe	Glu	Ile	Val	Tyr	Pro	Val	Leu	Val	Ile	Leu
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Lys	Cys	Asp	Ser	Ala	Val	Leu	Ser	Gly	Phe	Val	Leu	Met	Phe	Ile	Ala
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Cys	Ile	Val	Trp	Leu	Lys	Leu	Val	Ser	Phe	Ala	His	Thr	Asn	His	Asp
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Ile	Arg	Lys	Leu	Ile	Thr	Ser	Gly	Lys	Lys	Val	Asp	Asn	Glu	Leu	Thr
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Ala	Ala	Gly	Ile	Asp	Asn	Leu	Gln	Ala	Pro	Thr	Leu	Gly	Ser	Leu	Thr
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Leu	Ile	Phe	Thr	Gly	Leu	Gln	Gly	Phe	Ile	Ile	Glu	Gln	Tyr	Ile	Asn
				165					170					175	
Pro	Ile	Val	Val	Asn	Ser	Gln	His	Pro	Leu	Met	Gly	Gly	Leu	Leu	Asn
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Ala	Val	Glu	Thr	Val	Leu	Lys	Leu	Ser	Leu	Pro	Asn	Val	Tyr	Leu	Trp
		195					200					205			
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Glu	Ile	Leu	Arg	Phe	Gly	Asp	Arg	Glu	Phe	Tyr	Lys	Asp	Trp	Trp	Asn
225					230					235					240
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 His Glu Val Thr Tyr Leu Leu Phe His Ser Ser Ser Ala Tyr Ile Asn  
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 Tyr Gly Asn Tyr Val Asp Pro Glu Asn Met Lys Asp Pro Thr Phe Lys  
 35 40 45  
 Ser Leu Val Tyr Phe Met Leu Ala Pro Thr Leu Cys Tyr Gln Pro Thr  
 50 55 60  
 Tyr Pro Gln Thr Thr Cys Ile Arg Lys Gly Trp Val Thr Gln Gln Leu  
 65 70 75 80  
 Ile Lys Cys Val Val Phe Thr Gly Leu Met Gly Phe Ile Ile Glu Gln  
 85 90 95  
 Tyr Ile Asn Pro Ile Val Lys Asn Ser Lys His Pro Leu Lys Gly Asn  
 100 105 110  
 Phe Leu Asn Ala Ile Glu Arg Val Leu Lys Leu Ser Val Pro Thr Leu  
 115 120 125  
 Tyr Val Trp Leu Cys Met Phe Tyr Cys Phe Phe His Leu Trp Leu Asn  
 130 135 140  
 Ile Val Ala Xaa Leu Leu Cys Phe Gly Asp Arg Glu Phe Tyr Lys Asp  
 145 150 155 160  
 Trp Trp Asn Xaa Lys Thr Val Glu Glu Tyr Trp Arg Met Trp Asn Met  
 165 170 175  
 Pro Val His Lys Trp Ile Ile Arg His Ile Tyr Phe Pro Cys Ile Arg  
 180 185 190  
 Xaa Gly Phe Ser Arg Gly Val Ala Ile Leu Ile Ser Phe Leu Val Ser  
 195 200 205

Ala Val Phe His Glu Ile Cys Ile Ala Val Pro Cys His Ile Phe Lys  
 210 215 220

Phe Trp Ala Phe Ser Gly Ile Met Phe Gln Ile Pro Leu Val Phe Leu  
 225 230 235 240

Thr Arg Tyr Leu His Ala Thr Phe Lys His Val Met Val Gly Asn Met  
 245 250 255

Ile Phe Trp Phe Phe Ser Ile Val Arg Gln Pro Met Xaa Cys Leu Tyr  
 260 265 270

Asn Xaa His Asp Val Met Lys Gln Ala Arg Pro Ser Lys  
 275 280 285

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 <211> 254  
 <212> DNA  
 <213> Oryza sativa

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 tttcaacctt tgcattgttg ttctagttgc agtgaacagc aggcttatta tcgagaactt 180  
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 <212> PRT  
 <213> Oryza sativa

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 20 25 30

Phe Lys Gln Ser His Ala Gly Leu Phe Asn Leu Cys Ile Val Val Leu  
 35 40 45

Val Ala Val Asn Ser Arg Leu Ile Ile Glu Asn Leu Met Lys Tyr Gly  
 50 55 60

Leu Leu Ile Arg Ala Gly Phe Trp Phe Asn Asp Lys Ser Leu Arg Asp  
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 <212> DNA  
 <213> Oryza sativa

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 caggcctttt caacctatgc attgttggtt tagttgcagt gaacagcagg cttattatcg 180  
 agaacttaat gaagtatggc ttattaataa gagctggggt ttgggttaat gataaatcat 240  
 tgcgggactg gccacttcta atgtgttggt ttagtctgcc tgctttcccc ctgggtgcat 300  
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tatcttttgc acatacaaac catgatataa ggcaactgac catgggcggc aagaagggtg 540
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tatacttcat gatggctcct acactctgtt atcagccaag ctatccccga acttcatgtg 660
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gcttcattat tgagcaatac ataaatccaa ttgttgtgaa ttctcagcat ccattgaaag 780
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<212> PRT
<213> Oryza sativa

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Asp Glu Ala Ala Pro Gly Ser Pro Pro Arg Pro Arg Pro Arg Pro Arg
      35                      40                      45

Pro Arg Gly Gly Asp Ser Asn Gly Arg Ser Val Leu Arg Pro Gly Gly
      50                      55                      60

Gly Gly Gly Arg Gly Gly Gly Gly Asp Phe Ser Ala Phe Thr Phe Arg
      65                      70                      75                      80

Ala Ala Ala Pro Val His Arg Lys Ala Lys Glu Ser Pro Leu Ser Ser
      85                      90                      95

Asp Ala Ile Phe Lys Gln Ser His Ala Gly Leu Phe Asn Leu Cys Ile
      100                      105                      110

Val Val Leu Val Ala Val Asn Ser Arg Leu Ile Ile Glu Asn Leu Met
      115                      120                      125

Lys Tyr Gly Leu Leu Ile Arg Ala Gly Phe Trp Phe Asn Asp Lys Ser
      130                      135                      140

Leu Arg Asp Trp Pro Leu Leu Met Cys Cys Leu Ser Leu Pro Ala Phe
      145                      150                      155                      160

Pro Leu Gly Ala Phe Ala Val Glu Lys Leu Ala Phe Asn Asn Val Ile
      165                      170                      175

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Thr Asp Ala Val Ala Thr Cys Leu His Ile Phe Leu Ser Thr Thr Glu  
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 Ile Val Tyr Pro Val Leu Val Ile Leu Lys Cys Asp Ser Ala Val Leu  
 195 200 205  
 Ser Gly Phe Leu Leu Ile Phe Ile Ala Cys Ile Val Trp Leu Lys Leu  
 210 215 220  
 Val Ser Phe Ala His Thr Asn His Asp Ile Arg Gln Leu Thr Met Gly  
 225 230 235 240  
 Gly Lys Lys Val Asp Asn Glu Leu Ser Thr Val Asp Met Asp Asn Leu  
 245 250 255  
 Gln Pro Pro Thr Leu Gly Asn Leu Ile Tyr Phe Met Met Ala Pro Thr  
 260 265 270  
 Leu Cys Tyr Gln Pro Ser Tyr Pro Arg Thr Ser Cys Val Arg Lys Gly  
 275 280 285  
 Trp Leu Ile Arg Gln Ile Ile Leu Tyr Leu Ile Phe Thr Gly Leu Gln  
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 Gly Phe Ile Ile Glu Gln Tyr Ile Asn Pro Ile Val Val Asn Ser Gln  
 305 310 315 320  
 His Pro Leu Lys Gly Gly Leu Leu Asn Ala Val Glu Thr Val Leu Lys  
 325 330 335  
 Leu Ser Leu Pro Asn Val Tyr Leu Trp Leu Cys Met Phe Tyr Ala Phe  
 340 345 350  
 Phe His Leu Trp Leu Ser Ile Leu Ala Glu Ile Leu Arg Phe Gly Asp  
 355 360 365  
 Arg Glu Phe Tyr Lys Asp Trp Trp Asn Ala Lys Thr Ile Asp Glu Tyr  
 370 375 380  
 Trp Arg Lys Trp Asn Met Pro Val His Lys Trp Val Val Arg His Ile  
 385 390 395 400  
 Tyr Phe Pro Cys Met Arg Asn Gly Ile Ser Lys Glu Val Ala Val Leu  
 405 410 415  
 Ile Ser Phe Leu Val Ser Ala Val Leu His Glu Ile Cys Val Ala Val  
 420 425 430  
 Pro Cys Arg Ile Leu Lys Phe Trp Ala Phe Leu Gly Ile Met Leu Gln  
 435 440 445  
 Ile Pro Leu Ile Val Leu Thr Ala Tyr Leu Lys Ser Lys Phe Arg Asp  
 450 455 460  
 Thr Met Val Gly Asn Met Ile Phe Trp Phe Phe Phe Cys Ile Tyr Gly  
 465 470 475 480  
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Glu Lys Ala Arg  
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<210> 15  
<211> 1942  
<212> DNA  
<213> Glycine max

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cttcaattcg cctgagacaa ccaccgacag ttccgggtgat gacttggcca aggattctgg 180  
ttccgacgac tccatcaaca gcgacgacgc cgccgtcaat tcccaacagc aaaacgaaaa 240  
acaagacact gattttctccg tcctcaaatt cgccctaccgt ccttccgtcc ccgctcaccg 300  
caaagtgaag gaaagtccgc tcagctccga cactattttc cgtcagagtc acgcgggcct 360  
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atactaccat gacttgatga ataggaaaagg caaacttgac tgaagctacg gccattacat 1560  
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gaattccacg ggatatgcca gttcacgagg ctaattcatt atcttgatct atgtacttac 1740  
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aaaaaaaaaa aaaaaaaaaa aa 1942

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<211> 504  
<212> PRT  
<213> Glycine max

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20 25 30  
Asn Ser Pro Glu Thr Thr Thr Asp Ser Ser Gly Asp Asp Leu Ala Lys  
35 40 45

Asp	Ser	Gly	Ser	Asp	Asp	Ser	Ile	Asn	Ser	Asp	Asp	Ala	Ala	Val	Asn	
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Ser	Gln	Gln	Gln	Asn	Glu	Lys	Gln	Asp	Thr	Asp	Phe	Ser	Val	Leu	Lys	
65					70					75					80	
Phe	Ala	Tyr	Arg	Pro	Ser	Val	Pro	Ala	His	Arg	Lys	Val	Lys	Glu	Ser	
				85					90					95		
Pro	Leu	Ser	Ser	Asp	Thr	Ile	Phe	Arg	Gln	Ser	His	Ala	Gly	Leu	Phe	
			100					105					110			
Asn	Leu	Cys	Ile	Val	Val	Leu	Val	Ala	Val	Asn	Ser	Arg	Leu	Ile	Ile	
		115					120					125				
Glu	Asn	Leu	Met	Lys	Tyr	Gly	Trp	Leu	Ile	Lys	Ser	Gly	Phe	Trp	Phe	
130						135					140					
Ser	Ser	Lys	Ser	Leu	Arg	Asp	Trp	Pro	Leu	Phe	Met	Cys	Cys	Leu	Ser	
145					150					155					160	
Leu	Val	Val	Phe	Pro	Phe	Ala	Ala	Phe	Ile	Val	Glu	Lys	Leu	Ala	Gln	
				165					170					175		
Arg	Lys	Cys	Ile	Pro	Glu	Pro	Val	Val	Val	Val	Leu	His	Ile	Ile	Ile	
			180					185					190			
Thr	Ser	Thr	Ser	Leu	Phe	Tyr	Pro	Val	Leu	Val	Ile	Leu	Arg	Cys	Asp	
		195					200					205				
Ser	Ala	Phe	Val	Ser	Gly	Val	Thr	Leu	Met	Leu	Phe	Ser	Cys	Val	Val	
	210					215					220					
Trp	Leu	Lys	Leu	Val	Ser	Tyr	Ala	His	Thr	Asn	Tyr	Asp	Met	Arg	Ala	
225					230					235					240	
Leu	Thr	Lys	Leu	Val	Glu	Lys	Gly	Glu	Ala	Leu	Leu	Asp	Thr	Leu	Asn	
			245						250					255		
Met	Asp	Tyr	Pro	Tyr	Asn	Val	Ser	Phe	Lys	Ser	Leu	Ala	Tyr	Phe	Leu	
			260					265					270			
Val	Ala	Pro	Thr	Leu	Cys	Tyr	Gln	Pro	Ser	Tyr	Pro	Arg	Thr	Pro	Tyr	
		275					280					285				
Ile	Arg	Lys	Gly	Trp	Leu	Phe	Arg	Gln	Leu	Val	Lys	Leu	Ile	Ile	Phe	
	290					295					300					
Thr	Gly	Val	Met	Gly	Phe	Ile	Ile	Asp	Gln	Tyr	Ile	Asn	Pro	Ile	Val	
305					310					315					320	
Gln	Asn	Ser	Gln	His	Pro	Leu	Lys	Gly	Asn	Leu	Leu	Tyr	Ala	Thr	Glu	
				325					330					335		
Arg	Val	Leu	Lys	Leu	Ser	Val	Pro	Asn	Leu	Tyr	Val	Trp	Leu	Cys	Met	
			340					345					350			
Phe	Tyr	Cys	Phe	Phe	His	Leu	Trp	Leu	Asn	Ile	Leu	Ala	Glu	Leu	Leu	
		355					360					365				

Arg Phe Gly Asp Arg Glu Phe Tyr Lys Asp Trp Trp Asn Ala Lys Thr  
 370 375 380  
 Val Glu Asp Tyr Trp Arg Met Trp Asn Met Pro Val His Lys Trp Met  
 385 390 395 400  
 Ile Arg His Leu Tyr Phe Pro Cys Leu Arg His Gly Leu Pro Lys Ala  
 405 410 415  
 Ala Ala Leu Leu Ile Ala Phe Leu Val Ser Ala Leu Phe His Glu Leu  
 420 425 430  
 Cys Ile Ala Val Pro Cys His Ile Phe Lys Leu Trp Ala Phe Gly Gly  
 435 440 445  
 Ile Met Phe Gln Val Pro Leu Val Leu Ile Thr Asn Tyr Leu Gln Asn  
 450 455 460  
 Lys Phe Arg Asn Ser Met Val Gly Asn Met Ile Phe Trp Phe Ile Phe  
 465 470 475 480  
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 <213> Glycine max

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 cgcccagagac gaccacccgac agttccgggtg atgacttggc caaggattcc gggtccgacg 180  
 actccatcag cagcgcgcgc gcccaattcgc aaccgcaaca aaaacaagac actgatttct 240  
 ccgtcctcaa attcgcttac cgtccttcog tccccgctca tcgcaaagtg aaggaaagtc 300  
 cgctcagctc ccgacacccat tttccgctcag aagtcacgcg ggcctcttc aacctctgt 360



atagtaagtc cntgttgctg tgaataagcc gactcatcat tgagaatttt aaatgaaata 420  
 tggnttgggt tgatcaaadc cnggcntttt gggttaagct caaagtcant 470

<210> 18  
 <211> 38  
 <212> PRT  
 <213> Glycine max

<400> 18  
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 Arg Lys Val Lys Glu Ser Pro Leu Ser Ser Asp Thr Ile Phe Val Arg  
 20 25 30

Ser His Ala Gly Pro Leu  
 35

<210> 19  
 <211> 646  
 <212> DNA  
 <213> Triticum aestivum

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agctgggttt tggtttaagt gcaagatcgc tgggagattg gccacttctg atgtgctgcc 180  
tcactttacc cattttccca cttgctgctc tcatgaccgg agaattgggt caaaagaaan 240  
tcatccgtgg atcatgtgtc taccctcccc catataatta ttacaaccac tgccttatc 300  
ctatccggtg ntgtgatcct taaagtgtga accacantat atcctgggtt gtgnnttatgt 360  
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tgncccaaaa ntatngaaag ggtgctacac agggattcta ccnagaagaa aattaaagcc 480  
caactncaac aagtgtgtat cangttggcc caacactggg acaaccaatt taccggcan 540  
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<210> 20  
<211> 39  
<212> PRT  
<213> Triticum aestivum

<400> 20  
Ser Asp Ala Ile Phe Arg Gln Ser His Ala Gly Leu Leu Asn Leu Cys  
1 5 10 15

Ile Val Val Leu Ile Ala Val Asn Ser Arg Leu Ile Ile Glu Asn Leu  
20 25 30

Met Lys Tyr Gly Leu Leu Ile  
35

<210> 21  
<211> 1975  
<212> DNA  
<213> Triticum aestivum

<220>  
<221> unsure  
<222> (93)

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cccagaccgg caccctcccgg gcagcttcct cccttcccac ggcgggccgc caccgaaacc 180  
caaaaccccg ccccgaaact tccggaacct cccctccagt tccacccatg gccccgcccc 240  
gtccgtggcg gctgccacga tcgcgacgac ccctccctcc gcctccgcgc cgcctccctg 300  
gccgacggtc caccgagagg cggcgcatgg agcagccgca gcggcacgac gagatgccct 360  
gctaccgggc gtccggcgccg cccaccgccc ggtcaaggag agcccgtta gctccgacgc 420  
catcttccga cagagccatg caggtcttct gaatctatgc attgttgtgc tgattgcagt 480  
gaacagcagg ctcatatcgc agaacttaat gaagtatggc ctattaataa gagctggggt 540  
ttgggttagt gcaagatcgc tgggagattg gccacttctg atgtgctgcc tcactttacc 600  
cattttccca cttgctgctc tcatgaccga gaagtgggct caaagaaagc tcatccgtga 660  
tcatgtgtct attcttctcc atataattat tacaaccact gtccttatct atccggttgt 720  
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tattctagcc gaactcctcc gttttgggtg tctggaattc tacaaggact ggtggaacgc 1260  
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tcaagataag ttcaagaata caatgggtgg caacatgata ttttggttct tcttcagcat 1560  
agttgggcaa ccaatgtgtg ttctcttgta ctaccatgat gtcattgaaca gacaggctca 1620  
gacaaatggc tagttctgtt ttagaagtgc actataacac agatcgtccg aagcaaattg 1680  
gcccagggca atggaggggc ggctcctta atgtttcgcc atgggctgtt agagcttgct 1740  
atgctacgaa tccaagtttg tcagcatgat atgttccaat ccgttccagt tagctcgctg 1800  
cggtccaaat gtatgatatg ccggccgggg tgtgtaccga agatacccca gtgatgaagc 1860  
cgaagataac acgacctgcc acatgtgttt tgtgtatcgc tttcggttca tgtgccagca 1920  
gagttacgta cgtgatgccc tgttgatat aaagtgtacg tgccgtatga aaaaa 1975

<210> 22  
<211> 508  
<212> PRT  
<213> Triticum aestivum

<400> 22  
Met Ser Lys Gly Asn Pro Asp Pro His Leu Pro Gly Ser Phe Leu Pro  
1 5 10 15

Ser His Gly Gly Pro Pro Pro Lys Pro Lys Thr Pro Pro Arg Thr Phe  
20 25 30

Arg	Asn	Leu	Pro	Ser	Ser	Ser	Thr	His	Gly	Pro	Ala	Pro	Ser	Val	Ala	
		35					40					45				
Ala	Ala	Thr	Ile	Ala	Thr	Thr	Pro	Pro	Ser	Ala	Ser	Ala	Ala	Pro	Leu	
		50				55					60					
Pro	Pro	Thr	Val	His	Gly	Glu	Ala	Ala	His	Gly	Ala	Ala	Ala	Ala	Ala	
	65				70					75					80	
Arg	Arg	Asp	Ala	Leu	Leu	Pro	Gly	Val	Gly	Ala	Ala	His	Arg	Arg	Val	
				85					90					95		
Lys	Glu	Ser	Pro	Leu	Ser	Ser	Asp	Ala	Ile	Phe	Arg	Gln	Ser	His	Ala	
			100					105					110			
Gly	Leu	Leu	Asn	Leu	Cys	Ile	Val	Val	Leu	Ile	Ala	Val	Asn	Ser	Arg	
		115					120					125				
Leu	Ile	Ile	Glu	Asn	Leu	Met	Lys	Tyr	Gly	Leu	Leu	Ile	Arg	Ala	Gly	
	130					135					140					
Phe	Trp	Phe	Ser	Ala	Arg	Ser	Leu	Gly	Asp	Trp	Pro	Leu	Leu	Met	Cys	
	145				150					155					160	
Cys	Leu	Thr	Leu	Pro	Ile	Phe	Pro	Leu	Ala	Ala	Leu	Met	Thr	Glu	Lys	
				165					170					175		
Trp	Ala	Gln	Arg	Lys	Leu	Ile	Arg	Asp	His	Val	Ser	Ile	Leu	Leu	His	
			180					185					190			
Ile	Ile	Ile	Thr	Thr	Thr	Val	Leu	Ile	Tyr	Pro	Val	Val	Val	Ile	Leu	
		195				200						205				
Lys	Cys	Glu	Ser	Ala	Val	Leu	Ser	Gly	Phe	Val	Leu	Met	Phe	Ile	Ala	
	210					215					220					
Ser	Ile	Thr	Trp	Leu	Lys	Leu	Val	Ser	Phe	Ala	His	Thr	Asn	Tyr	Asp	
	225				230					235					240	
Ile	Arg	Ile	Leu	Ser	Gln	Ser	Ile	Glu	Lys	Gly	Ala	Thr	His	Gly	Ser	
				245					250					255		
Ser	Ile	Asp	Glu	Glu	Asn	Ile	Lys	Gly	Pro	Thr	Ile	Asn	Ser	Val	Val	
		260						265					270			
Tyr	Phe	Met	Leu	Ala	Pro	Thr	Leu	Cys	Tyr	Gln	Pro	Ser	Tyr	Pro	Arg	
		275					280					285				
Thr	Ala	Phe	Ile	Arg	Lys	Gly	Trp	Val	Thr	Arg	Gln	Leu	Ile	Lys	Cys	
	290					295					300					
Val	Val	Phe	Thr	Gly	Leu	Met	Gly	Phe	Ile	Ile	Glu	Gln	Tyr	Ile	Asn	
	305				310					315					320	
Pro	Ile	Val	Gln	Asn	Ser	Lys	His	Pro	Leu	Asn	Gly	Asn	Phe	Leu	Asp	
				325					330					335		
Ala	Ile	Glu	Arg	Val	Leu	Lys	Leu	Ser	Val	Pro	Thr	Leu	Tyr	Val	Trp	
			340					345					350			

Leu Cys Met Phe Tyr Ser Phe Phe His Leu Trp Leu Asn Ile Leu Ala  
 355 360 365  
 Glu Leu Leu Arg Phe Gly Asp Arg Glu Phe Tyr Lys Asp Trp Trp Asn  
 370 375 380  
 Ala Lys Thr Val Glu Glu Tyr Trp Arg Met Trp Asn Met Pro Val His  
 385 390 395 400  
 Lys Trp Ile Val Arg His Ile Tyr Phe Pro Cys Ile Arg Asn Gly Leu  
 405 410 415  
 Ser Lys Gly Cys Ala Ile Leu Ile Ala Phe Leu Val Ser Ala Val Phe  
 420 425 430  
 His Glu Leu Cys Ile Ala Val Pro Cys His Ile Phe Lys Leu Trp Ala  
 435 440 445  
 Phe Ser Gly Ile Met Phe Gln Ile Pro Leu Leu Phe Leu Thr Lys Tyr  
 450 455 460  
 Leu Gln Asp Lys Phe Lys Asn Thr Met Val Gly Asn Met Ile Phe Trp  
 465 470 475 480  
 Phe Phe Phe Ser Ile Val Gly Gln Pro Met Cys Val Leu Leu Tyr Tyr  
 485 490 495  
 His Asp Val Met Asn Arg Gln Ala Gln Thr Asn Gly  
 500 505

<210> 23  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:PCR primer

<400> 23  
 cttagcttct tccttcaatc

20

<210> 24  
 <211> 33  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:PCR primer

<400> 24  
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33

<210> 25  
 <211> 497  
 <212> PRT  
 <213> Mus musculus

<400> 25  
 Met Gly Asp Arg Gly Gly Ala Gly Ser Ser Arg Arg Arg Thr Gly Ser  
 1 5 10 15

Arg Val Ser Val Gln Gly Gly Ser Gly Pro Lys Val Glu Glu Asp Glu  
 20 25 30  
 Val Arg Asp Ala Ala Val Ser Pro Asp Leu Gly Ala Gly Gly Asp Ala  
 35 40 45  
 Pro Ala Pro Ala Pro Ala Pro Ala His Thr Arg Asp Lys Asp Gly Arg  
 50 55 60  
 Thr Ser Val Gly Asp Gly Tyr Trp Asp Leu Arg Cys His Arg Leu Gln  
 65 70 75 80  
 Asp Ser Leu Phe Ser Ser Asp Ser Gly Phe Ser Asn Tyr Arg Gly Ile  
 85 90 95  
 Leu Asn Trp Cys Val Val Met Leu Ile Leu Ser Asn Ala Arg Leu Phe  
 100 105 110  
 Leu Glu Asn Leu Ile Lys Tyr Gly Ile Leu Val Asp Pro Ile Gln Val  
 115 120 125  
 Val Ser Leu Phe Leu Lys Asp Pro Tyr Ser Trp Pro Ala Pro Cys Val  
 130 135 140  
 Ile Ile Ala Ser Asn Ile Phe Val Val Ala Ala Phe Gln Ile Glu Lys  
 145 150 155 160  
 Arg Leu Ala Val Gly Ala Leu Thr Glu Gln Met Gly Leu Leu Leu His  
 165 170 175  
 Val Val Asn Leu Ala Thr Ile Ile Cys Phe Pro Ala Ala Val Ala Leu  
 180 185 190  
 Leu Val Glu Ser Ile Thr Pro Val Gly Ser Val Phe Ala Leu Ala Ser  
 195 200 205  
 Tyr Ser Ile Met Phe Leu Lys Leu Tyr Ser Tyr Arg Asp Val Asn Leu  
 210 215 220  
 Trp Cys Arg Gln Arg Arg Val Lys Ala Lys Ala Val Ser Thr Gly Lys  
 225 230 235 240  
 Lys Val Ser Gly Ala Ala Ala Gln Gln Ala Val Ser Tyr Pro Asp Asn  
 245 250 255  
 Leu Thr Tyr Arg Asp Leu Tyr Tyr Phe Ile Phe Ala Pro Thr Leu Cys  
 260 265 270  
 Tyr Glu Leu Asn Phe Pro Arg Ser Pro Arg Ile Arg Lys Arg Phe Leu  
 275 280 285  
 Leu Arg Arg Val Leu Glu Met Leu Phe Phe Thr Gln Leu Gln Val Gly  
 290 295 300  
 Leu Ile Gln Gln Trp Met Val Pro Thr Ile His Asn Ser Met Lys Pro  
 305 310 315 320  
 Phe Lys Asp Met Asp Tyr Ser Arg Ile Ile Glu Arg Leu Leu Lys Leu  
 325 330 335

Ala Val Pro Asn His Leu Ile Trp Leu Ile Phe Phe Tyr Trp Phe Phe  
340 345 350

His Ser Cys Leu Asn Ala Val Ala Glu Leu Leu Gln Phe Gly Asp Arg  
355 360 365

Glu Phe Tyr Arg Asp Trp Trp Asn Ala Glu Ser Val Thr Tyr Phe Trp  
370 375 380

Gln Asn Trp Asn Ile Pro Val His Lys Trp Cys Ile Arg His Phe Tyr  
385 390 395 400

Lys Pro Met Leu Arg His Gly Ser Ser Lys Trp Val Ala Arg Thr Gly  
405 410 415

Val Phe Leu Thr Ser Ala Phe Phe His Glu Tyr Leu Val Ser Val Pro  
420 425 430

Leu Arg Met Phe Arg Leu Trp Ala Phe Thr Ala Met Met Ala Gln Val  
435 440 445

Pro Leu Ala Trp Ile Val Gly Arg Phe Phe Gln Gly Asn Tyr Gly Asn  
450 455 460

Ala Ala Val Trp Val Thr Leu Ile Ile Gly Gln Pro Val Ala Val Leu  
465 470 475 480

Met Tyr Val His Asp Tyr Tyr Val Leu Asn Tyr Asp Ala Pro Val Gly  
485 490 495

Val

<210> 26  
<211> 520  
<212> PRT  
<213> Arabidopsis thaliana

<400> 26  
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Gly Gly Glu Phe Val Asp Leu Asp Arg Leu Arg Arg Arg Lys Ser Arg  
20 25 30

Ser Asp Ser Ser Asn Gly Leu Leu Leu Ser Gly Ser Asp Asn Asn Ser  
35 40 45

Pro Ser Asp Asp Val Gly Ala Pro Ala Asp Val Arg Asp Arg Ile Asp  
50 55 60

Ser Val Val Asn Asp Asp Ala Gln Gly Thr Ala Asn Leu Ala Gly Asp  
65 70 75 80

Asn Asn Gly Gly Gly Asp Asn Asn Gly Gly Gly Arg Gly Gly Gly Glu  
85 90 95

Gly Arg Gly Asn Ala Asp Ala Thr Phe Thr Tyr Arg Pro Ser Val Pro  
100 105 110

Ala	His	Arg	Arg	Ala	Arg	Glu	Ser	Pro	Leu	Ser	Ser	Asp	Ala	Ile	Phe	115	120	125
Lys	Gln	Ser	His	Ala	Gly	Leu	Phe	Asn	Leu	Cys	Val	Val	Val	Leu	Ile	130	135	140
Ala	Val	Asn	Ser	Arg	Leu	Ile	Ile	Glu	Asn	Leu	Met	Lys	Tyr	Gly	Trp	145	150	155
Leu	Ile	Arg	Thr	Asp	Phe	Trp	Phe	Ser	Ser	Arg	Ser	Leu	Arg	Asp	Trp	165	170	175
Pro	Leu	Phe	Met	Cys	Cys	Ile	Ser	Leu	Ser	Ile	Phe	Pro	Leu	Ala	Ala	180	185	190
Phe	Thr	Val	Glu	Lys	Leu	Val	Leu	Gln	Lys	Tyr	Ile	Ser	Glu	Pro	Val	195	200	205
Val	Ile	Phe	Leu	His	Ile	Ile	Ile	Thr	Met	Thr	Glu	Val	Leu	Tyr	Pro	210	215	220
Val	Tyr	Val	Thr	Leu	Arg	Cys	Asp	Ser	Ala	Phe	Leu	Ser	Gly	Val	Thr	225	230	235
Leu	Met	Leu	Leu	Thr	Cys	Ile	Val	Trp	Leu	Lys	Leu	Val	Ser	Tyr	Ala	245	250	255
His	Thr	Ser	Tyr	Asp	Ile	Arg	Ser	Leu	Ala	Asn	Ala	Ala	Asp	Lys	Ala	260	265	270
Asn	Pro	Glu	Val	Ser	Tyr	Tyr	Val	Ser	Leu	Lys	Ser	Leu	Ala	Tyr	Phe	275	280	285
Met	Val	Ala	Pro	Thr	Leu	Cys	Tyr	Gln	Pro	Ser	Tyr	Pro	Arg	Ser	Ala	290	295	300
Cys	Ile	Arg	Lys	Gly	Trp	Val	Ala	Arg	Gln	Phe	Ala	Lys	Leu	Val	Ile	305	310	315
Phe	Thr	Gly	Phe	Met	Gly	Phe	Ile	Ile	Glu	Gln	Tyr	Ile	Asn	Pro	Ile	325	330	335
Val	Arg	Asn	Ser	Lys	His	Pro	Leu	Lys	Gly	Asp	Leu	Leu	Tyr	Ala	Ile	340	345	350
Glu	Arg	Val	Leu	Lys	Leu	Ser	Val	Pro	Asn	Leu	Tyr	Val	Trp	Leu	Cys	355	360	365
Met	Phe	Tyr	Cys	Phe	Phe	His	Leu	Trp	Leu	Asn	Ile	Leu	Ala	Glu	Leu	370	375	380
Leu	Cys	Phe	Gly	Asp	Arg	Glu	Phe	Tyr	Lys	Asp	Trp	Trp	Asn	Ala	Lys	385	390	395
Ser	Val	Gly	Asp	Tyr	Trp	Arg	Met	Trp	Asn	Met	Pro	Val	His	Lys	Trp	405	410	415
Met	Val	Arg	His	Ile	Tyr	Phe	Pro	Cys	Leu	Arg	Ser	Lys	Ile	Pro	Lys	420	425	430



Thr Leu Ala Ile Ile Ile Ala Phe Leu Val Ser Ala Val Phe His Glu  
 435 440 445  
 Leu Cys Ile Ala Val Pro Cys Arg Leu Phe Lys Leu Trp Ala Phe Leu  
 450 455 460  
 Gly Ile Met Phe Gln Val Pro Leu Val Phe Ile Thr Asn Tyr Leu Gln  
 465 470 475 480  
 Glu Arg Phe Gly Ser Thr Val Gly Asn Met Ile Phe Trp Phe Ile Phe  
 485 490 495  
 Cys Ile Phe Gly Gln Pro Met Cys Val Leu Leu Tyr Tyr His Asp Leu  
 500 505 510  
 Met Asn Arg Lys Gly Ser Met Ser  
 515 520

09/856,018

A:\>dir

Volume in drive A has no label

Directory of A:\

File not found

1,457,664 bytes free

A:\> -

onscreen message when STIC PC tried to read submitted disk